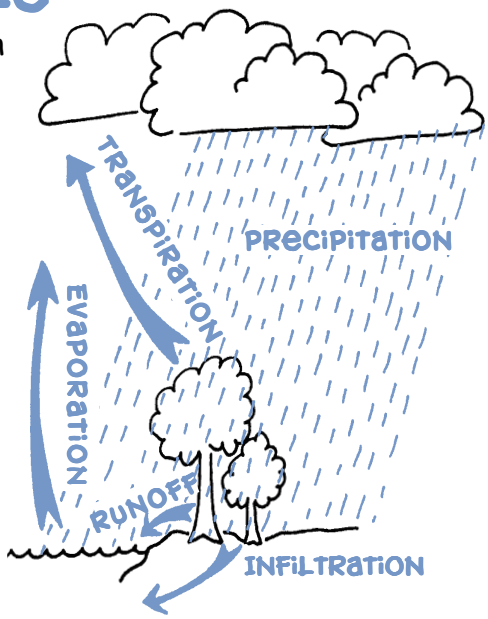
DON'T DRINK THE WATER!

On a hot day, nothing takes care of your thirst better than a cool drink of water. Until about 100 years ago, people would have run down to the shores of the Great Lakes, knelt in the surf, cupped their hands, and scooped up mouthfuls of fresh, cool water. While it is still possible to run down there and scoop up water, you'd be crazy to drink it!

TOAST TO THE WATER CYCLE

Get a glass of safe, fresh, cool drinking water. Sit in a circle with your family or friends. Pass the glass around the circle and ask each person to offer a toast to the water cycle. Here are some possibilities to get you started. Hold the glass high and say, "To this water, that was once used to soak George Washington's false teeth," or "Here's to this water that was once inside the body of a Tyranosaurus Rex until, of course, it was eliminated!" When everyone has had a chance to offer a toast, take the glass and drink it down with a flourish! Did anyone say "Ugh!"?



The water we are using today is the only water that has ever been on the planet. It's all the water we will ever have. Fortunately, it is naturally cleaned and purified as it filters through the ground and evaporates into the atmosphere. Remember the water cycle?

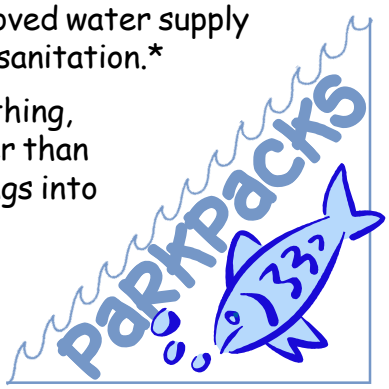
THE GREAT LAKES HAVE SPOILED US!

We don't really worry about where we will get our next glass of water. After all, when was the last time you turned on the water faucet and nothing came out?

But clean water isn't plentiful everywhere! While the earth is 75% water, less than 1% is fresh water that is available for human use. And, with the human population at over 6 billion and still growing, clean water is a global problem. The World Health Organization estimated that, at the beginning of 2000, one-sixth (1.1 billion people) of the world's population was without access to improved water supply and two-fifths (2.4 billion people) lacked access to improved sanitation.*

One problem is that we are using water for growing food, bathing, drinking, disposing of wastes, and industrial processing faster than the water can be recycled naturally. We are also putting things into the water that natural processes can't remove.

* From "Global Water Supply and Sanitation Assessment 2000 Report" © 2000 World Health Organization and United Nations Children's Fund



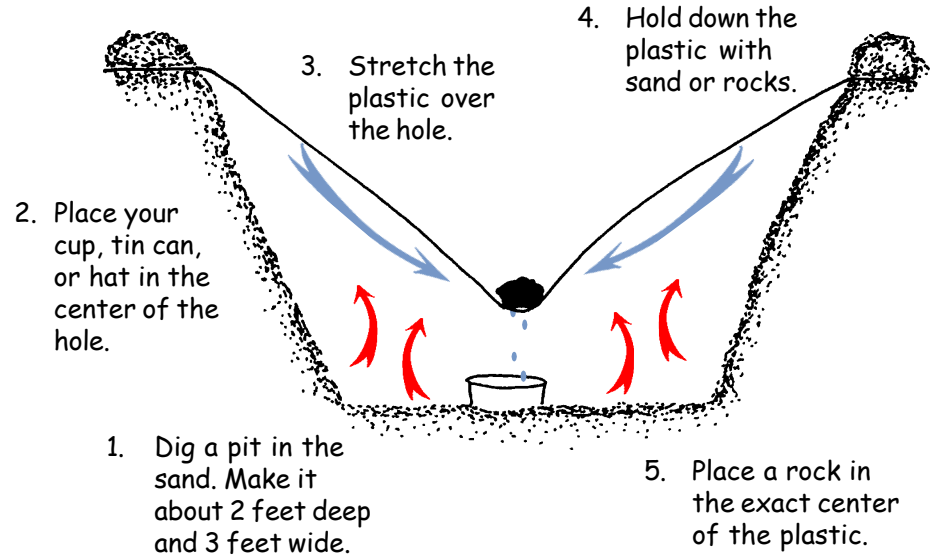
What if you have to drink the water?

Imagine yourself in a survival situation. While you could live a long time without food, you will only survive a few days without water. Drinking available surface water could be very risky. Most surface water, even in remote wilderness areas, is contaminated. It could contain pathogens that could make you fatally ill.

To make water safe to drink, you will need water purification tablets or the equipment to boil water for at least ten minutes. But what if you didn't plan on being stranded away from civilization? If you have a piece of plastic and something that can be used as a cup, you might have a chance!

Make a Solar Still

You can try to make a solar still on the beach just for fun, but **don't drink the water!** It's hard to prevent cross-contamination from the sand, soil, and rocks on the beach. It's just not worth the risk. Of course, if you were in a survival situation, the risk of dying from dehydration would be higher than the risk from contamination. In that case, you would carefully make your still and drink the water. Get a piece of black plastic about 3 foot square, a small rock, and something that will catch the water. Then, follow this diagram to make your still:



A solar still is a cool experiment for us. But, in some parts of the world, solar stills are the only source of clean drinking water!

Here's how it works: Solar energy is absorbed by the black plastic. As the air inside the hole heats up, moisture in the ground evaporates. Impurities like dirt, germs, and salt are left behind. The evaporated moisture condenses on the underside of the plastic. When the drops get big enough, they run down the sides of the plastic and collect in the cup. (Wait, does that sound like a water cycle?)

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